

WATER QUALITY MONITORING

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The Maine DEP BLWQ has a broad sampling program to assess water quality conditions. Water sampling programs are conducted to carry out two sections of environmental law: the Water Classification Program (38 MRSA, Article 4-A) described earlier, and Protection and Improvement of Waters (38 MRSA, Chapter 3). The DEP's sampling program is made up of four components shown below. In addition to these programs, data is provided by the Penobscot Indian Nation (PIN), the United States Geological Survey (USGS), United States Environmental Protection Agency (EPA), Department of Marine Resources (DMR), and many volunteer monitoring groups.

A. Ambient Water Quality Monitoring

- ◆ determines attainment based on standards such as dissolved oxygen, bacteria, or **trophic state** (absence or presence of algae blooms)
- ◆ assesses whether discharges violate certain standards
- ◆ is required as a condition for hydropower licensing
- ◆ assesses contamination levels of metals and organics in fish and shellfish tissues and sediments
- ◆ assesses the condition of aquatic communities
- ◆ assesses lake problems through sampling efforts of both staff and volunteers
- ◆ used to assess trends in water quality



B. Treatment Plant Compliance Monitoring

- ◆ assesses compliance with wastewater discharge licenses
- ◆ determines water quality effects of combined sewer outflows

C. Investigations

- ◆ respond to complaints of unlicensed discharges and other environmental concerns

D. Modeling

- ◆ used to predict the effects of present and proposed discharges using water quality data and computer modeling



For specifics regarding our water quality monitoring programs, see Part III of the complete 305(b), or contact the DEP BLWQ.

Primary Data Gathering Methods

